

DOCUMENT RESUME

ED 138 151

HE 008 804

AUTHOR Lee, Alfred M.
 TITLE Performance Budgeting for Undergraduate Delivery Systems in the 1980's: A Strategy for the States.
 PUB DATE Apr 77
 NOTE 30p.
 EDRS PRICE MF-\$0.83 HC-\$2.06 Plus Postage.
 DESCRIPTORS Budgeting; *Delivery Systems; *Enrollment Projections; Federal Aid; Federal State Relationship; *Government Role; Higher Education; *Models; Nontraditional Students; Public Education; *State Aid; Student Costs; *Student Financial Aid; Tuition
 IDENTIFIERS Government School Relationship; *Subsidies

ABSTRACT

Enrollment projections for the 1980's need to be based on at least seven variables; the size of the 18-to-24-year-old cohort; the rate of participation of that cohort; the rate of participation of nontraditional students; the full-time/part-time ratio of participation; the division of participants among public, private, and proprietary institutions; the appropriations for public student aid; and the interstate movement of students. Based on these factors, this study considers the management of the enrollment decline and the priority for the public sector. A delivery system is proposed that is based on a performance formula applied to a system of public higher education in which students share in the expense of actual instruction and all other expenses associated with delivering instruction. A method for determining the percentage of state subsidy to the student is described, and three performance strategies for declining enrollment are detailed. It is concluded that the state subsidy must take account of overall state concerns and the desire to gather funding from federal student aid programs. State practices in student aid can be regularly adjusted according to changes in the federal government. (LBH)

 * Documents acquired by ERIC include many informal unpublished *
 * materials not available from other sources. ERIC makes every effort *
 * to obtain the best copy available. Nevertheless, items of marginal *
 * reproducibility are often encountered and this affects the quality *
 * of the microfiche and hardcopy reproductions ERIC makes available *
 * via the ERIC Document Reproduction Service (EDRS). EDRS is not *
 * responsible for the quality of the original document. Reproductions *
 * supplied by EDRS are the best that can be made from the original. *

ED138151

PERFORMANCE BUDGETING
FOR UNDERGRADUATE DELIVERY SYSTEMS
IN THE 1980'S:

A Strategy for the States

Alfred M. Lee

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRO-
DUCED EXACTLY AS RECEIVED FROM
THE PERSON OR ORGANIZATION ORIGIN-
ATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT
OFFICIAL NATIONAL INSTITUTE OF
EDUCATION POSITION OR POLICY

April, 1977

HE 00 8804

SECTIONS

Enrollment-Driven Subsidy	p. 1
The 1980's	p. 2
The Management of Decline	p. 4
Priority for the Public Sector	p. 7
Socialist Competition	p. 9
Identifying Budget Sectors	p. 12
A Delivery System	p. 16
The Public Perception	p. 19
The Performance Formula	p. 20
The Constituency Budget	p. 23
Fixing the Subsidy	p. 24
Student Aid	p. 25

1. Enrollment-Driven Subsidy

Public subsidy for postsecondary education is distributed, by and large, on an enrollment-driven basis. States and localities provide institutional subsidy to public colleges and universities according to enrollment; state scholarship aid, generally available to students at private institutions, is distributed according to the need or the talent of students, but it enters institutional accounts on an enrollment-driven basis. Federal student aid programs, designed to finance student need at colleges and proprietary schools, are also enrollment-driven.

Because performance is measured and rewarded by the number of customers subscribing to the service, current financing practices resemble a market situation. The resemblance can be deceiving. Many private colleges receive neither public subsidy nor the sustenance of a large endowment. Public institutions within a state are generally coordinated with such care that a customer's choice is usually determined by geography and by his high school credentials.

While beneficial to higher education in a period of growth, enrollment financing can also threaten institutional survival. Because expenditures cannot be reduced as precipitously as enrollment revenues can drop, falling enrollment will compel institutions to raise their prices -- with the possible result of losing more customers and raising prices further.

2. The 1980's

Enrollment projections for the 1980's need to be based on at least seven variables:

- o The size of the 18 to 24-year old age cohort
- o The rate of participation of that cohort
- o The rate of participation of non-traditional students
- o The full-time : part-time ratio of participation
- o The division of participants among public, private and proprietary institutions
- o The appropriations for public student aid
- o The interstate movement of students.

During the 1980's the 18 to 24-year old age cohort will shrink. But as family-size shrinks, sibling overlap will decline and both the participation rate and the full-time : part-time ratio can be expected to increase.

Forecasting is seldom accurate. In 1974 and in 1975, the National Center for Education Statistics made September estimates of September college enrollments that fell about half a million students below the actual enrollments. It is not likely that 1976 projections of 1986 enrollments can be more accurate.

Although the tools are crude and the variables many, the one certainty is that the size of the age cohort will shrink. The gloomiest projections are that the cohort will lead to enrollment declines of 25% between 1980 and 1994.¹

If the future conforms to these anticipations, the

¹ Allan M. Cartter and Lewis C. Solmon, "Implications for Faculty," Change, September 1976, which contains a more complete analysis of the possible declines.

higher education community will need to make some "hard choices." The difficulties will be aggravated by the same systems of financing that encouraged growth in the past.

3. The Management of Decline

The theme of any enrollment decline is budgetary imbalance. Personnel cannot be terminated as quickly as students can stop enrolling; heating and power costs will rise. Managing the decline means balancing the budget.

The opportunities divide into three general categories, which differ in their emphases.

- o The Federal Strategy. If falling enrollment unbalances budgets and the budgets are rebalanced with higher tuition, greater student need will be generated at both public and private institutions. While affluent families will have to absorb the higher prices, a majority of families ought to qualify for Federal assistance. In effect, institutions will cover most of their deficits with Federal funds.

Federal appropriations, however, have never matched the 1972 Federal commitment. A reliance on the 1976 renewal of Federal programs is a strategy that can become dynamic only if the Congress increases its appropriations. But if the Congress adopts a policy of greater appropriation to assist higher education during a decline in enrollment, the structure of programs can also include new approaches to distribution that are less enrollment-based.

- o The Tourist Strategy. In the 1960's, state coordinating and regulatory boards placed

²A 1976 survey by the College Entrance Examination Board helps quantify the degree of need. "Based on the students' estimates of their families' ability to contribute, three-fourths of the families could not afford the average \$2800 yearly expenses at public four-year institutions, the College Board said. Only one-sixth of the families could afford the \$4600 average yearly cost of attending private four-year institutions." The figures apply to families of students taking the SAT test -- with a median income of \$16,400, higher than the national median. The Chronicle of Higher Education, September 13, 1976.

restrictions on the number of out-of-state students who could enroll at public institutions. This assured access to state institutions for state residents in a period of rapidly increasing enrollments.

In a period of declining enrollments, the coordinating and regulatory boards will have different concerns. Out-of-state students can help pay the fixed costs of education and dormitory operations, and they can contribute to the overall economy of communities by way of movie houses, gasoline stations, clothing stores, book stores and other "college town" enterprises.

- o The Populist Strategy. A progressive reform in the user tax (tuition) at public institutions, as adjusted by student aid, can "let the people decide" the economic health and the survival of institutions. A state system can price tuition at 100% (or some other high rate) of "cost," as defined by educational and general support expenditures. The effect will be to redistribute income from families that have to pay the full tuition to families that receive need-based student aid, which can be portable among the public, private and proprietary institutions. This policy is a response to the demographic complaint, now seldom if ever voiced, that the state university is "a country club for the rich, paid for by the poor farmer and the workingman."

Because of the portability of all funding, enrollments at private institutions can be expected to increase relative to enrollments at public institutions. Overall, the strategy can be expected to reduce enrollments slightly.³

³ The pioneer model for the populist strategy is the Wisconsin proposal by W. Lee Hansen and Burton A. Weisbrod, "A New Approach to Higher Education," Financing Higher Education: Alternatives for the Federal Government (Iowa City: The American College Testing Program) 1971. In this model, "some weakly motivated young people from affluent families" are expected to stop participating. Although Hansen and Weisbrod predict an increase in enrollment among young people from poorer families, they did not anticipate the surge of state and Federal student aid funding in the 1970's, which has in large part accomplished the objective of social equity.

This movement will accelerate the budgetary imbalance at public institutions. As budgets are corrected with higher tuition, it can be expected that in certain states education at the formerly public institutions will be priced higher than at the formerly private institutions. Patterns of interstate migration will also change.

These three strategies can be applied simultaneously. The populist strategy, which finances postsecondary education exclusively with aid to students, clearly generates "need" where none would exist with institutional subsidy. This new "need" is a magnet for greater need-generated Federal student assistance. When state student aid is reserved for state residents attending institutions within the state, the coordinating or regulatory board can be justified in applying "traditional" pricing to out-of-state students; an enrollment-driven formula for institutional subsidy of these students can encourage higher income families in other states to export part of their personal incomes into a state using a tourist strategy. (Conversely, higher income families in a state adopting a populist strategy are likely to send their young to states adopting a strictly tourist strategy.)

4. Priority for the Public Sector

Because the possible enrollment declines of the 1980's have been perceived as a threat to institutional survival, the populist strategy has been presented as a way of eliminating the pricing disadvantage carried by the private sector as well as a way of allowing students and their families to decide the health of institutions.

Eliminating pricing disadvantages among sectors requires an even-handed approach to student aid, however, and the practical application of even-handedness can be disruptive. The Committee for Economic Development has described the likely pattern of application.

Although Federal funding practices should be more or less constant throughout the country, state practices may be expected to vary. In some states, for instance, the tradition of private education is stronger than it is in others. In these states, individual student grants from public money may be more acceptable to the taxpayer than they would be in states where most higher education takes place in state-owned and state-operated institutions. State-funded student grants may be more acceptable in the East and Middle West than in areas where there are comparatively few private colleges and universities, notably the Southwestern, Rocky Mountain, and Pacific regions.

To be fair, states like South Carolina, Florida, Texas and California provide tuition-equalization

⁴Committee for Economic Development, The Management and Financing of Colleges (New York : CED) 1973, pp. 65-66.

grants almost as actively as the states of the Northeast. Florida, California and South Carolina rank first, fourth and fifth among the fifty states in the amount of the average grant awarded in 1976-77.⁵ California and Texas are also national leaders in maintaining low tuition. In these states, the public funding of scholarships for private colleges is added on to the higher education budget. But the perception of CED is probably accurate were the scholarships to be funded by dramatic increases in tuition at the public institutions.

States where the strategy is politically acceptable happen to be states with large private sectors; these are the states where the strategy can cause the greatest decline in the public sector. State appropriations would be spread too thin. In the public institutions, already over-tenured in 1976,⁶ educational stagnation is the likeliest result of the policy. But one objective of a state coordinating or regulatory board is to prevent this from happening. If enrollment-driven institutional subsidy is converted into student aid, the public sector will have to be given priority in states with large private sectors, just as state institutions will receive priority by default in regions where there are few private institutions.

⁵ The Chronicle of Higher Education, October 11, 1976.

⁶ The Chronicle of Higher Education, September 20, 1976. Data gathered by the A.A.U.P. show that tenure has been granted nationally to 65% of the public college-level professoriate and to 62% of the public two-year college-level professoriate -- the two largest public categories.

5. Socialist Competition

When the priority is established, a variation of the populist strategy can promote competition and performance within the public sector. Drucker has described the performance of "service institutions [as] exemplified by school and university, and also by the hospital."

What they need is Lange's socialist competition.

The "customer" of this kind of service institution is not really a customer; he is a tributary. He pays for the service institution whether he wants to or not, out of taxes, levies such as compulsory insurance, or overhead allocations. The products of these institutions are not meant to supply a want. They are meant to supply a need. School and hospital, but also the typical service staff in business, supply what everybody should have, ought to have, must have, because it is "good for him," or good for society.

Higher education is a service theoretically available to the whole public, as is health care. Although the public is not the "customer," the public interest is represented by the consumer decisions of actual students and families. Under a system of "socialist competition," the performance of public institutions can be assessed by the enrollments each institution can attract over the long term.

A typical enrollment-driven formula gives the appearance of competition without the substance. Jencks and Reisman have described the process by

⁷ Peter F. Drucker, Management: Tasks, Responsibilities, Practices (New York: Harper & Row) 1974, p. 162.

which public higher education was transformed into a kind of government agency during the first half of this century.

Dependence on regular legislative appropriations affected the style as well as the structure of the public sector. Public accountability, for example, almost inevitably led to bureaucratization. Elaborate administrative machinery had to be set up to ensure that no embarrassing mistakes were made, especially in the expenditure of public funds....Accountability also influenced the time perspective of public college administrators. In the long run a public college and its trustees might be answerable to the people, but in the short run it was mainly subject to the whims of a few clearly identifiable individuals such as the governor and a few key legislators.⁸

As a result, the clearest differences among campuses within a typical public sector have been limited to geographical location and, at least in theory, admissions policies. Students who are better prepared tend to enroll in the university sector, which tends to require their preparation. Students seeking highly specialized programs (such as agriculture, architecture, engineering and nursing) seldom have more than one choice. Most students attend the comprehensive or the two-year college built or converted to serve their geographical area.

Tuition is usually a standardized component of a student's total outlay, in which subsistence costs can be dominated by geography. Quality is generally perceived as input (admissions selectivity as well as an attractive location) rather than by any measurement of outcomes. But if the public sector is to be oriented

⁸ Christopher Jencks and David Reisman, The Academic Revolution (Garden City, N.Y.: Doubleday) 1968, p. 266.

toward performance, whether the motivation is named "socialist competition" or "a market-price mechanism," pricing will have to precede location and quality will have to precede admissions selectivity and scenery.

When performance is operationally defined by enrollments, public institutions must acquire much greater autonomy in managing their educational offerings and finances; reaching for quality, and establishing their own tuitions.

The need for institutional autonomy seems to contradict the natural wishes of state coordinating and regulatory boards to operate the public sector efficiently. The efficiencies that a state board can apply to a public system were necessary during a period of rapidly expanding enrollment; but during enrollment decline, efficiency can limit effectiveness. An institution is made less effective when it is not allowed to compete with sister institutions by setting its own tuition and offering new or better programs. Effectiveness, however, does not demand the sacrifice of efficiency. The system-wide expenditure under an efficiency formula already in effect can serve as a benchmark for appropriations under a performance formula.

6. Identifying Budget Sectors

A public system managed for performance must have a clear sense of mission, especially in distinguishing between the public as "customer" -- where the public can better be thought of as a "constituency" -- and the student as customer. The distinction is important because part of what the constituency is financing is not intended for delivery to undergraduate customers. Expenditures for public goals ought to be borne by the public.

The prevailing classification structure for budgeting in higher education designates three areas of spending: primary programs, support programs, and auxiliary enterprises. Spending on auxiliary enterprises is not charged to the educational accounts, but the educational accounts carry the full burden of all primary and support programs.

There are four primary programs:

- o Instruction
- o Research
- o Public Service
- o Student Aid?

In many states, student aid is in effect administered by the state board or another authority. Only in Alaska are the programs for organized research and public service financed directly from the state higher education accounts.

The Alaskan budget can help clarify accounts, as can the budget of postsecondary education's step-sister,

the proprietary institution. At a proprietary school, the student's tuition -- less the school's taxable profit -- is dedicated to instruction and to support programs wholly related to instruction or student services. What is omitted in the customer's account at a proprietary school is what "everybody should have, ought to have, must have," because it is "good for society."

Howard R. Bowen has enumerated the services that higher education provides its public constituency.

Writers on finance often implicitly assume that the system of higher education is a mere factory grinding out credit-hours of instruction which will be converted into personal income....But institutions of higher education are not merely engaged in instruction, as important and as socially beneficial as that function may be. They also serve as centers of learning with many cultural, political, and economic influences that radiate out to society. Colleges and universities are the foundations of our civilization. They are the repository and guardian of accumulated knowledge and wisdom; they are centers for the advancement of fresh ideas and new interpretations of old values; they are the main source of new science and technology; they are centers of aesthetic, moral, and social criticism; they are major patrons of the arts and literature; they are of critical importance in advancing the health and safety of the nation; and they provide a great pool of talent that engages in study and evaluation on a multitude of social problems.⁹

Bowen names these activities "the advancement of civilization," which other commentators have rather lamely called "the intangibles" or "intellectual curiosity." The analogy in the stockholder economy is

⁹ Howard R. Bowen, "Finance and the Aims of American Higher Education," Financing Higher Education: Alternatives for the Federal Government, pp. 161-62.

a service institution like Bell Laboratories, which advances "learning" in a haven within the commercial operations of AT&T. Conceptually, "the advancement of civilization" is a tradition that is easy to explain; the difficulty has been in expressing the concept in budgetary terms.

Public service and unsponsored research are the two primary programs that clearly represent funding for society's needs. Financially, however, these programs are an incomplete representation of the total intellectual, scientific and cultural activity that benefits "civilization" in an understood way, and benefits students only indirectly and intangibly, if at all. Often a faculty member's contribution occurs only in his own unremunerated effort that is concurrent with a full instructional load. More commonly his activity occurs during the three-month period of his summer vacation, when he receives salary although he is under no obligation to his institution. This suggests a rule of thumb for identifying the social dimension of the instructional program: a portion of the instructional budget equal to one-quarter of the expenditure for full-time faculty. This describes unobligated faculty time, separated from the 39 weeks of obligated time that include scheduled vacations of several weeks.

Although a faculty's use of this unobligated period can be surveyed, no survey instrument can measure the "quality," the "value," or the "social relevance" of faculty activity. Very likely an instrument cannot measure actual time, either, because faculty members seldom keep accurate time logs of their own activity and because different individuals -- such as tenured full professors and untenured instructors -- are likely to measure their activities differently. The most valuable

activity is probably not measurable at all: a faculty member's effort to diminish his own obsolescence. This is a longitudinal activity not readily assignable to particular students or particular budgets and can best be described as the maintenance of human capital. It is by nature an intergenerational transfer of quality, and is inseparable from the more identifiable intellectual, scientific and cultural components of the social dimension.

The quarter-time rule of thumb substitutes a quantifiable assumption in place of survey data that can quantify, at best, only subjective recollections. The statistical assumption is that all unobligated time is used to advance "learning" although this is certainly not so. Neither is it so that "learning" fails to advance when a faculty is expected to engage in instruction. What seems clear is that a student attending college need not be expected to share in the entire expense of vacationing his professors and sponsoring their research and public service.

The analysis produces two sets of accounts: one is an institution's enrollment-driven budget for education and general support and the other is a budget for the definably social contribution of higher education. The budget for the social contribution consists of

- o 25% of the full-time instructional budget
- o the budget for unsponsored research
- o the budget for public service.

Society's budget for the primary programs also requires a budget for support programs, which can be counted as a proportion of the total support budget equal to the social share of the primary budget.

7. A Delivery System

When a performance formula is applied to a system of public higher education, students will share in the expense of actual instruction and all other expenses associated with delivering instruction.

A performance budget can be illustrated by revising the accounts for a hypothetical comprehensive college with an FTE enrollment of 5000 and an expenditure per student of \$2200.

	<u>Current Program Budget</u>	<u>Performance Program Budget</u>	
		<u>Customers</u>	<u>Constituency</u>
Instruction	\$ 6,000,000	\$4,800,000	\$1,200,000
Research	1,000,000		1,000,000
Public Service	200,000		200,000
Student Aid	(State)	(State)	
Academic Support	550,000	366,667	183,333
Student Services	650,000	650,000	
Institutional Support	1,000,000	666,667	333,333
Plant Operations	1,600,000	1,066,667	533,333
<u>Total</u>	\$11,000,000	\$7,550,000	\$3,450,000
<u>Per Student</u>	\$2200	\$1510	\$690

In the alternative model, the budget for student services is not apportioned to the social account. (The model has been simplified by treating all faculty as full-time.)

Just as a rule of thumb has to be used in dividing instructional costs between students and society, another rule of thumb is necessary to measure the subsistence costs of attending college. In a model, the figures can be data gathered by the College Scholarship Service for commuter students at four-year public institutions in

1976-77.¹⁰ Whether a state board chooses commuter figures or residential figures ought to depend on specific conditions within a public system, but the expense of continuously surveying actual subsistence costs is likely to require a state board to use actual dormitory charges and CSS national figures for other expenses.

	Current Program Budget	Performance Program Budget Customers / Constituency
Educational Total	\$11,000,000	\$ 7,550,000 \$3,450,000
Room and Board (\$793)		3,965,000
Other (\$1034)		5,170,000
Delivery Total		\$16,685,000
<u>Per Student</u>		\$3337

The monetary outlay per student is \$3337 in this model. Foregone income is not calculated because no persuasive method for measuring it is available, especially in a period of very high unemployment in the 18 to 24-year old age cohort. But foregone income is relevant, if unquantifiable, when a state board and legislature decide the degree to which the public will subsidize the higher education of individuals.

The degree of subsidy can range from 100%, as in many Western European countries as well as in Eastern Europe, down to 0%, as advocated by Hansen and Weisbrod. It can be instructive, however, to measure the effects of certain subsidies that are politically possible.

<u>Subsidy</u>	<u>Subsidy Per Student</u>	<u>Price Of Tuition</u>
15%	\$ 501	\$1009

¹⁰The Chronicle of Higher Education Deskbook, p. 122.

20%	667	843
25%	834	676
30%	1001	509
33%	1101	409
40%	1335	175

The price of tuition is the expenditure per student in the customer's account (\$1510) net of the subsidy per student in the delivery system.

8. The Public Perception

When the percentage of the subsidy has been set by a state legislature, it will have to be maintained over a prolonged period of time so that the public will sense continuity and maintain confidence in the state system. To the extent that taxes for public higher education help spread part of a family's expenses for college over a lifetime of earnings, a sense of continuity is a basis for justifying the tax expenditure on higher education.

A subsidy based on a constant percentage of delivery expenses is also necessary if the purpose of tuition is to encourage performance through competition rather than merely to finance the bureaucracy.

9. The Performance Formula

In a period of declining enrollment, performance can be promoted when institutions can compete in both quality and price. A direction that this competition might take can be imagined by applying three different strategies to the hypothetical comprehensive college with 5000 students and a budget of \$11 million. For comparative purposes, the three strategies can be represented as three separate institutions with identical budgets at the start of an aggregate enrollment decline from 15,000 to 12,000 FTE students. At each institution in the model, public funding for societal benefits remains constant, functioning in part as a cushion against the decline, and the public subsidy for students is set at 25%.

With such assumptions, the public appropriation is \$7,620,000 for a hypothetical institution at the start of the enrollment decline. Table 1 shows the budgets when enrollment has fallen to 12,000 for the three colleges.

College A has elected to pursue quality by increasing its faculty budget by \$1 million, its academic support by \$100,000, and its student services by \$50,000. Under an assumption that the strategy prevents enrollment from dropping below 4500 students, Table 1 shows that the state appropriation will rise only \$60,000 to \$7,680,000 as the tuition rises \$360 (+57%) from \$663 to \$993.

College B has elected a strategy of cost control and price competition by reducing the student's share of faculty salary by 20% (a 16% cut in the two-part

TABLE 1

Three Performance Strategies for Declining Enrollment

Strategy	College A (Quality)		College B (Price)		College C (No Change)	
Students Retained	4500		4500		3000	
	<u>Customers / Constituency</u>		<u>Customers / Constituency</u>		<u>Customers / Constituency</u>	
Instruction	\$5,800,000	\$1,200,000	\$3,840,000	\$1,200,000	\$4,800,000	\$1,200,000
Research		1,000,000		1,000,000		1,000,000
Public Service		200,000		200,000		200,000
Student Aid	(State)		(State)		(State)	
Academic Support	466,667	183,333	293,334	183,333	366,667	183,333
Student Services	700,000		585,000		650,000	
Institutional Support	666,667	333,333	600,000	333,333	666,667	333,333
Plant Operations	1,066,667	583,333	1,066,667	533,333	1,066,667	533,333
<u>Total</u>	\$8,700,000	\$3,450,000	\$6,385,000	\$3,450,000	\$7,550,000	\$3,450,000
Per Student	\$1933	\$767	\$1419	\$767	\$2517	\$1150
Room and Board	793		793		793	
Other	1034		1034		1034	
<u>Delivery Total</u>	<u>\$3760</u>		<u>\$3246</u>		<u>\$4344</u>	
25% Subsidy	940		812		1086	
<u>Tuition</u>	<u>\$993</u>		<u>\$607</u>		<u>\$1431</u>	
Appropriation	\$4,230,000	\$3,450,000	\$3,654,000	\$3,450,000	\$3,258,000	\$3,450,000
	(\$7,680,000)		(\$7,104,000)		(\$6,708,000)	

instructional budget), the student's share of academic support by 20%, student services by 10%, and the student's share of institutional support by 10% -- in short, by cutting the customers' budget by 15.4%. If this pricing strategy results in a tuition that can limit enrollment decline to 10%, Table 1 shows that the state appropriation will decline by \$516,000 to \$7,104,000 as the tuition declines by \$26 (-4%) from \$633 to \$607.

College C has continued business as usual. It has not sought to improve its quality or reduce its tuition and suffers competitively against the two institutions that have done so. College C bears a disproportionate share of the enrollment decline; in this comparison, its enrollment falls to 3000. Table 1 shows that the appropriation is reduced by \$912,000 to \$6,708,000, but the tuition is increased by \$798 (+126%) from \$663 to \$1431.

In all three examples the constituency budget is held unrealistically constant throughout the enrollment decline.

10. The Constituency Budget

There are two hazards in establishing a separate research and cultural budget.

- o Institutions can misuse the budget to paper over poor performance in the instructional mission
- o State agencies and other fiscal interests within a state can mount raiding forays, on this exposed portion of the higher education budget dedicated to a cause so imprecise as "the advancement of civilization."

It would seem necessary for a state legislature to dedicate future appropriations, however constitutionally possible, to a Seven-Year Research and Cultural Fund for public higher education; the fund should ride on an appropriate price index. Although it will be subject to seven-year reviews of actual need, state government must accept the proposition that the fund is as perpetual as higher education itself.

Yearly monitoring and reallocation, clearly, are a responsibility of the state coordinating or regulatory board. While the fund can legitimately serve as a buffer to abrupt declines in enrollment, it cannot be unresponsive to reality either.

Performance budgeting is an analytical tool, which is imperfect, and a formula for charging tuition, which is probably fair to students and state treasurers alike. The Seven-Year Research and Cultural Fund can be a management tool for a state board, or it can simply pass into the domain of yet another enrollment-driven institutional subsidy.

11. Fixing the Subsidy

The subsidy in the public sector need not be fixed uniformly for all types of institution, and probably ought not be.

- o Pricing at two-year institutions should reflect the special mission of these colleges, especially those in geographical areas remote from baccalaureate facilities. The subsidy at two-year colleges should result in a tuition lower than for upper-division programs, at least, at four-year colleges.
- o Pricing at undergraduate professional and specialized institutions will require individual attention according to manpower and specialized considerations.
- o Other adjustments are probably necessary for pricing the delivery of the service to part-time students, in some states to encourage more students to participate and in others to encourage part-time students to study full time.

The state board's decision on the rate of subsidy for delivery must take account of overall state concerns, including the need to preserve commitments and assets in the 1980's tourist market and the want to gather funding from Federal student aid programs.

12. Student Aid

A state must decide its own effort in providing scholarships and loans.

- o The prevailing consensus is that state student aid ought to be portable between the public and the private sectors.
- o Because performance budgeting helps equalize the customer's share of public college instruction with the customer's share of proprietary instruction, an effective use of resources can include proprietary scholarships equal in amount per student, at least, to the subsidy at public two-year institutions.
- o State scholarships at private academic institutions can be most equitably administered as tuition-equalization grants.

State practice in student aid can be regularly adjusted according to changes in the Federal commitment.

ALFRED M. LEE is an assistant professor of English at the New Jersey Institute of Technology (Newark College of Engineering to January 1, 1975), a state-controlled, doctorate granting institution. As Al Lee, he is the author of Time (1974), a collection of poems, and the editor of The Major Young Poets (1971), an anthology. Lee prepared this document in the context of intrastate debate generated by the New Jersey Commission on Financing Post-Secondary Education.